FUJITSU

Fujitsu LifeBook

B Series

BIOS Guide

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B6210/B6220

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FUJITSU COMPUTER SYSTEMS

B Series BIOS

BIOS SETUP UTILITY

The BIOS Setup Utility is a program that sets up the operating environment for your notebook. Your BIOS is set at the factory for normal operating conditions, therefore there is normally no need to set or change the BIOS environment to operate your notebook.

The BIOS Setup Utility configures:

- Device control feature parameters, such as changing I/O addresses and boot devices.
- System Data Security feature parameters, such as passwords.

Entering the BIOS Setup Utility

To enter the BIOS Setup Utility, do the following (or use the TrustedCore Menu, as detailed in the next section):

1. Turn on or restart your notebook.
2. Press [F2] once the Fujitsu logo appears on the screen. This will open the main menu of the BIOS Setup Utility with the current settings displayed.
3. Press the [RIGHT ARROW] or [LEFT ARROW] key to scroll through the other setup menus to review or alter the current settings.

Using the TrustedCore Menu

When the Fujitsu logo appears on the screen. press the [Enter] key or click on the left mouse or touchpad button; the TrustedCore Menu will appear.

The TrustedCore Menu provides shortcuts to the following menus and information screens:

- BIOS Setup
- Diagnostic Screen
- Boot Menu
- Patent Information
- System Information
- Continue Booting

Clicking on any of the fields will invoke the screen, information, or action described.

The Boot Menu can also be invoked by pressing the [F12] key when the Fujitsu logo appears on the screen.

Navigating through the Setup Utility

The BIOS setup utility consists of six menus; Main, Advanced, Security, Boot, Info and Exit. This document explains each menu, including all submenus and setup items.

The following procedures allow you to navigate the setup utility menus:

1. To select a menu, use the cursor keys: [←],[→].
2. To select a field within a menu or a submenu, use the cursor keys: [↑], [↓].
3. To select the different values for each field, press the [Spacebar] or [+] to change to the next higher selection and [F5] or [-] to go to the next lower selection.
4. To activate a submenu press the [Enter] key.
5. To return to a menu from a submenu, press the [Esc] key.
6. To go to the Exit menu from any other menu, press the [Esc] key.

- Selecting a field causes a help message about the field to be displayed on the right-hand side of the screen.
- Pressing the Enter key with the highlight on a selection that is not a submenu or auto selection will cause a list of all options for that item to be displayed. Pressing the Enter key again will select the highlighted choice.

7. Pressing the [F9] key resets all items in the BIOS to the default values.
8. Pressing the [F10] key saves the current configuration and exits the BIOS Setup Utility. You will be asked to verify this selection before it is executed.
9. Pressing the [F1] key gives you a general help screen.

Entering the Setup Utility After a Configuration Change or System Failure

If there has been a change in the system configuration that does not match the parameter settings stored in your BIOS memory, or there is a failure in the system, the system beeps and/or displays an error message after the Power On Self Test (POST). If the failure is not too severe, it will give you the opportunity to modify the settings of the setup utility, as described in the following steps:

1. When you turn on or restart the computer there is a beep and/or the following message appears on the screen:

   ```
   Error message - please run SETUP
   program Press <F1> key to continue,
   <F2> to run SETUP
   ```

2. If an error message is displayed on the screen, and you want to continue with the boot process and start the operating system anyway, press the [F1] key.

- If your notebook emits a series of beeps that sounds like a code and the display is blank, refer to the Troubleshooting Section of the system User's Guide. The Troubleshooting Section includes a list of error messages and their meanings.
- If your data security settings require it, you may be asked for a password before the operating system will be loaded.

3. If an error message is displayed on the screen, and you want to enter the setup utility, press the [F2] key.
4. When the setup utility starts with a fault present, the system displays the following message:

   ```
   Warning!
   Error message
   [Continue]
   ```

5. Press any key to enter the setup utility. The system will then display the Main Menu with current parameters values.

MAIN MENU – SETTING STANDARD SYSTEM PARAMETERS

The Main Menu allows you to set or view the current system parameters. Follow the instructions for Navigating through the Setup Utility to make any changes.

The following tables show the names of the menu fields for the Main menu and its submenus, all of the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use.

System Time and System Date can also be set from your operating system without using the setup utility. Use the calendar and time icon on your Windows Control Panel.

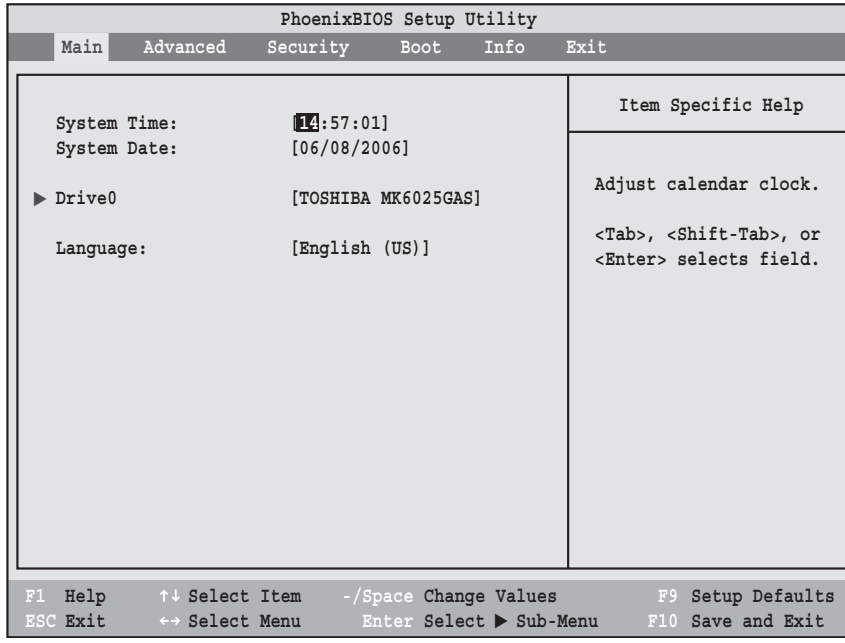

Figure 1. Main Menu

Table 1: Fields, Options and Defaults for the Main Menu

Menu Field	Options	Default	Description
System Time:	——	——	Sets and displays the current time. Time is in a 24 hour format of hours:minutes:seconds with 2 digits for each. (HH:MM:SS). Example: 16:45:57. You may change each segment of the time separately. Move between the segments with the [Tab] key and/or [Shift] + [Tab] keys.

Table 1: Fields, Options and Defaults for the Main Menu

Menu Field	Options	Default	Description
System Date:	—	—	Sets and displays the current date. Date is in a month/day/year numeric format with 2 digits each for month and day and 4 digits for year. (MM/DD/YYYY) for example: 03/20/2006. You may change each segment of the date separately. Move between the segments with the [Tab] key and/or [Shift] + [Tab] keys.
Drive0	Selects the Drive0 Serial ATA drive submenu	The product number of the hard drive.	Display the type of device on this ATA/IDE interface. Pressing the Enter key selects the Drive0 submenu allowing additional device configuration options for this interface.
Language:	• English (US) • Japanese (JP)	[English (US)]	The default setting differs between the US/European and the Japanese model. Selects the display language for the BIOS.

Drive0 Submenu of the Main Menu

The Drive0 submenu identifies what serial ATA/IDE devices are installed.

Note: Actual hard drive label shown may vary. Depending on the drive type, information such as cylinders, heads and sectors may or may not be displayed.

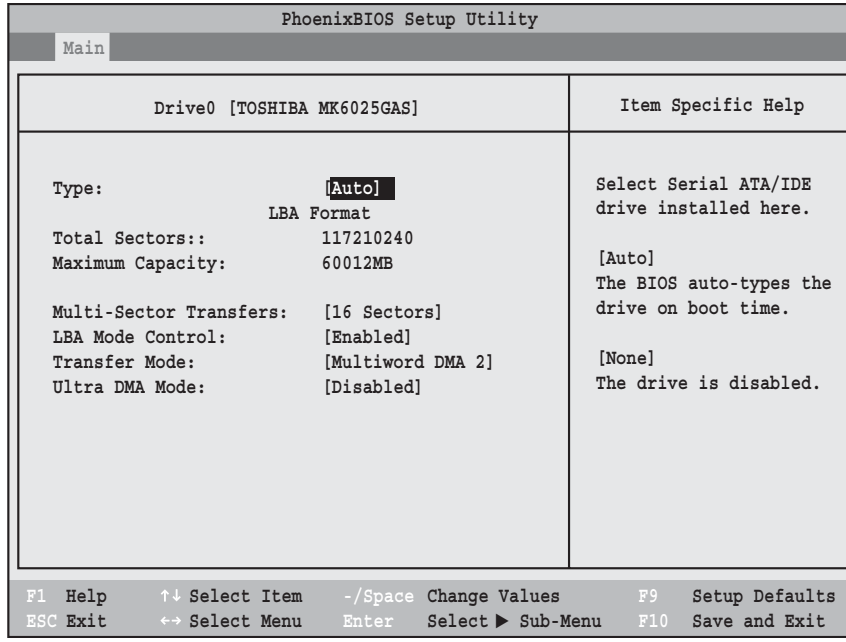
PhoenixBIOS Setup Utility
Main
Drive0 [TOSHIBA MK6025GAS]
Item Specific Help
Type: [Auto]
LBA Format
Total Sectors:: 117210240
Maximum Capacity: 60012MB
Multi-Sector Transfers: [16 Sectors]
LBA Mode Control: [Enabled]
Transfer Mode: [Multiword DMA 2]
Ultra DMA Mode: [Disabled]
Select Serial ATA/IDE drive installed here.
[Auto]
The BIOS auto-types the drive on boot time.
[None]
The drive is disabled.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 2. Drive0 Submenu

Table 2: Fields, Options and Defaults for the Drive0 Submenu of the Main Menu

Menu Field	Options	Default	Description
Type:	• Auto • None	[Auto]	Selects the ATA/IDE device type. Select Auto to have the type automatically identified by the BIOS at POST. If None is selected, none of the following Set-up items appear. To toggle between Auto and None press the spacebar.
LBA Format			**Logical Block Addressing (LBA)**
Total Sectors:	___	___	The total number of sectors on your hard disk
Maximum Capacity:	___	___	The maximum capacity of your hard disk
Multi-Sector Transfers:	___	[16 Sectors]	This option cannot be changed when Auto is selected; it is automatically selected.
LBA Mode Control:	___	[Enabled]	Enables or disables logical Block Addressing in place of Cylinder, Head, Sector addressing. This option cannot be changed when Auto is selected; it is automatically selected.

Table 2: Fields, Options and Defaults for the Drive0 Submenu of the Main Menu

Menu Field	Options	Default	Description
Transfer Mode:	___	[Multiword DMA 2]	This option cannot be changed when Auto is selected; it is automatically selected. Selects the method for moving data to/from the drive. Autotype the drive to select the optimum transfer mode.
Ultra DMA Mode:	___	[Disabled]	This option cannot be changed when Auto is selected; it is automatically selected. Selects the method for moving data to/from the drive. Autotype the drive to select the optimum transfer mode.

Exiting from Main Menu

When you have finished setting the parameters on this menu, you can either exit from the setup utility, or move to another menu. If you wish to exit from the setup utility, press the [Esc] key, use the cursor keys to go to the Exit menu, or press [F10] to exit and save. If you wish to move to another menu, use the cursor keys.

ADVANCED MENU – SETTING DEVICE FEATURE CONTROLS

The Advanced Menu allows you to:

- Set the communication mode for the parallel port and infrared port.
- Select between the display panel and an external CRT display.
- Enable or disable compensation for your display.
- Configure CPU features.
- Configure USB features.
- Configure miscellaneous features of the system.
- View the event logging information.

Follow the instructions for Navigating through the Setup Utility to make any changes.

The following tables show the names of the menu fields for the Advanced Menu and its submenus, all of the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use.

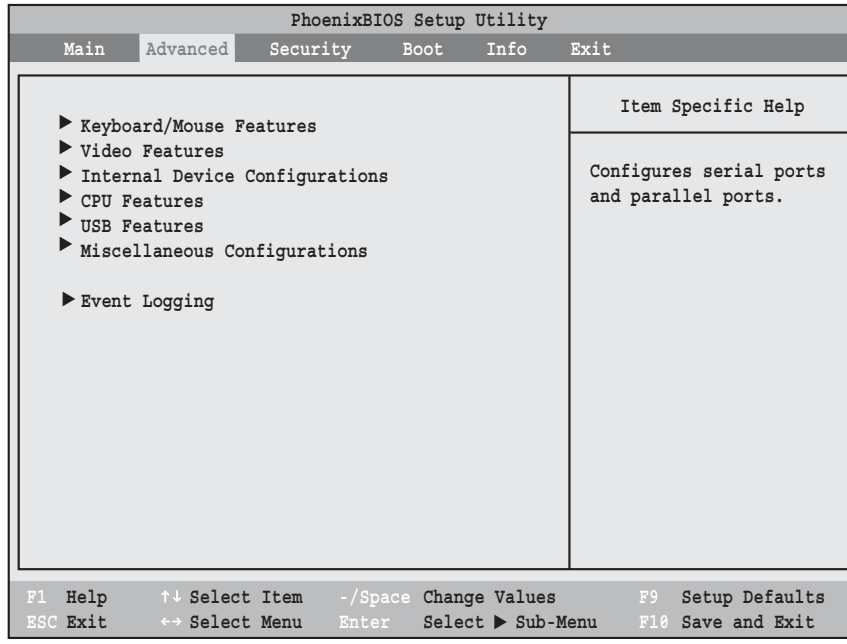

Figure 3. Advanced Menu

Table 3: Fields, Options and Defaults for the Advanced Menu

Menu Field	Description
Keyboard/Mouse Features	When selected, opens the Keyboard/Mouse Features submenu, which allows enabling or disabling the NumLock feature.
Video Features	When selected, opens the Video Features submenu, which allows setting of the display parameters, including routing of video signals to different displays.
Internal Device Configurations	When selected, opens the Internal Device Configurations submenu, which allows enabling or disabling the IDE, Bluetooth, LAN and WLAN Controllers.

Table 3: Fields, Options and Defaults for the Advanced Menu

Menu Field	Description
CPU Features	When selected, opens the CPU Features submenu, which allows setting of Intel Speed-Step features. Also allows you to enable and disable the On Battery/AC Optimization.
USB Features	When selected, opens the USB Features submenu, which allows enabling or disabling USB and SCSI SubClass support.
Miscellaneous Configurations	When selected, opens the Miscellaneous Features submenu, which allows enabling or disabling the power button and Wake Up On LAN, and configuring the volume settings.
Event Logging	When selected, opens the event logging submenu.

Keyboard/Mouse Features Submenu of the Advanced Menu

Keyboard/Mouse Features submenu is for enabling or disabling the NumLock.

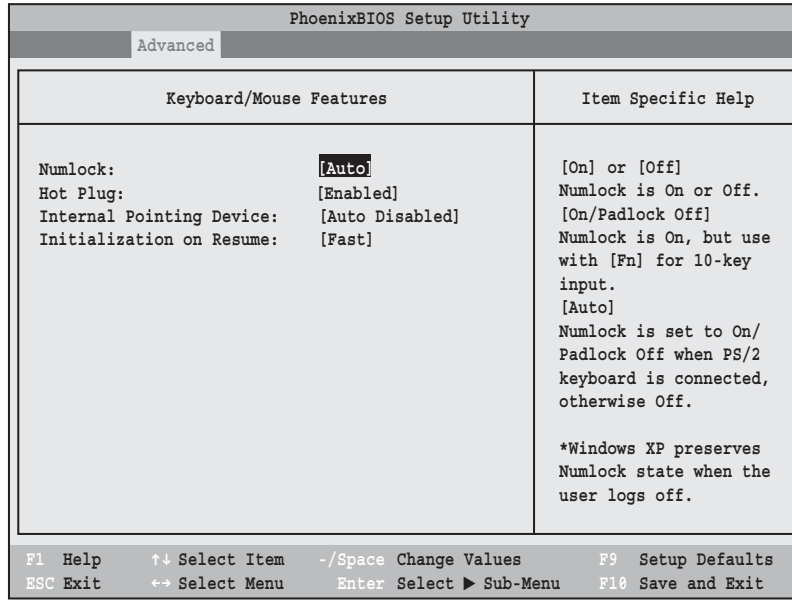
PhoenixBIOS Setup Utility
Advanced
Keyboard/Mouse Features
Item Specific Help
Numlock: [Auto]
Hot Plug: [Enabled]
Internal Pointing Device: [Auto Disabled]
Initialization on Resume: [Fast]
[On] or [Off]
Numlock is On or Off.
[On/Padlock Off]
Numlock is On, but use with [Fn] for 10-key input.
[Auto]
Numlock is set to On/ Padlock Off when PS/2 keyboard is connected, otherwise Off.
*Windows XP preserves Numlock state when the user logs off.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 4. Keyboard/Mouse Features Submenu

Table 4: Fields, Options and Defaults for the Keyboard/Mouse Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Numlock:	• Auto • On • Off • On/Padlock Off	[Auto]	Sets the NumLock function state when the computer completes booting. When [On] or [Off], Numlock is on or off. When [On/Padlock Off] is selected, Numlock is on, but [Fn] key must be pressed used for 10-key input. When [Auto] is selected, Numlock is set to On/Padlock Off when a PS/2 keyboard is connected, otherwise it is off. Windows XP preserves Numlock state when the user logs off.
Hot Plug:	• Disabled • Enabled	[Enabled]	Enables and disables the ability to plug a mouse or keyboard into the PS/2 port and have it immediately recognized and activated.
Internal Pointing Device:	• Auto Disabled • Manual Setting • Always Enabled • Always Disabled	[Auto Disabled]	Sets the device controlling the mouse cursor on the screen. Always Enabled makes the pointing device always enabled whether there is an external mouse or not. Always Disabled makes the pointing device always disabled. Auto Disabled disables the internal pointing device when an external pointing device is connected to the PS/2 port. Manual Setting allows the device to be enabled or disabled using a HotKey.
Initialization on Resume:	• Fast • Normal	[Fast]	When Fast is selected, initialization for the external PS/2 devices is optimized to speed up on Resume. When Normal is selected, initialization is not optimized.

Video Features Submenu of the Advanced Menu

The Video Features Submenu is for setting the display parameters.

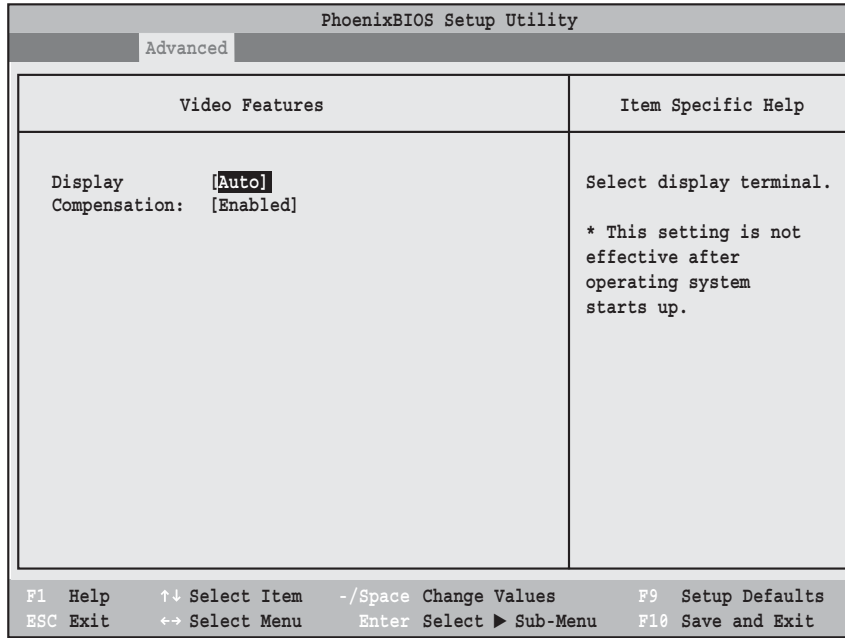
PhoenixBIOS Setup Utility
Advanced
Video Features
Item Specific Help
Display [Auto]
Compensation: [Enabled]
Select display terminal.
* This setting is not effective after operating system starts up.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 5. Video Features Submenu

Table 5: Fields, Options and Defaults for the Video Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Display:	• Internal Flat-Panel • External • Auto	[Auto]	Selects where the video signal will be routed.
Compensation:	• Disabled • Enabled	[Enabled]	Enables or disables compensation which controls spacing on the display. When enabled, displays with less than pixel resolution 800 x 600 will still cover the entire screen.

Internal Device Configurations Submenu of the Advanced Menu

The Internal Device Configurations submenu allows the user to configure other internal devices.

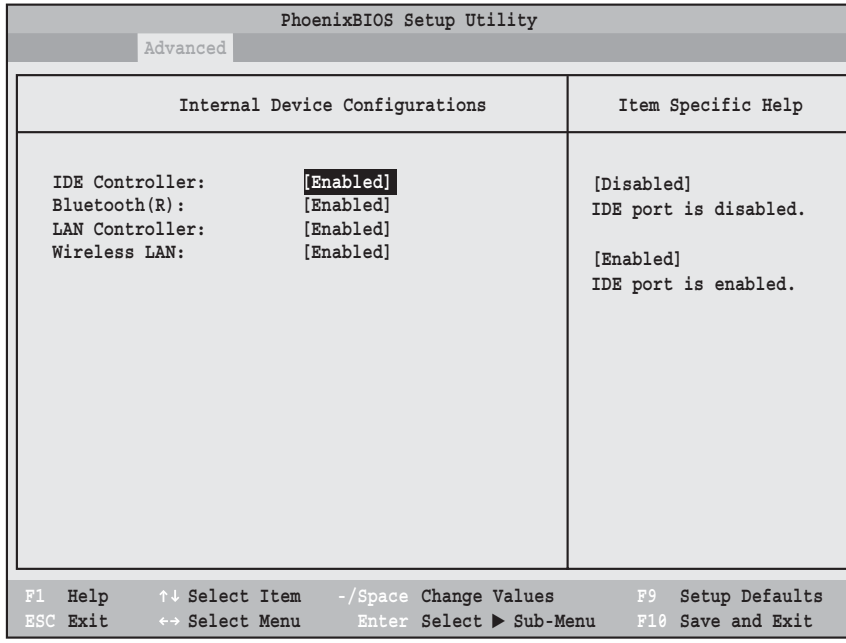

Figure 6. Internal Device Configurations Submenu

Table 6: Fields, Options and Defaults for Internal Device Configurations Submenu of Advanced Menu

Menu Field	Options	Default	Description
IDE Controller:	• Disabled • Enabled	[Enabled]	Enables or disables selected IDE devices.
Bluetooth(R):	• Disabled • Enabled	[Enabled]	Enables or disables the Bluetooth device.
LAN Controller:	• Disabled • Enabled	[Enabled]	LAN controller is enabled or disabled automatically, based upon system detection of the presence of a LAN cable. NOTE: This field may not be present if you have a wireless LAN installed.
Wireless LAN:	• Disabled • Enabled	[Enabled]	Enables or disables the Wireless LAN device.

CPU Features Submenu of the Advanced Menu

The CPU Features submenu configures certain features of the CPU in the system.

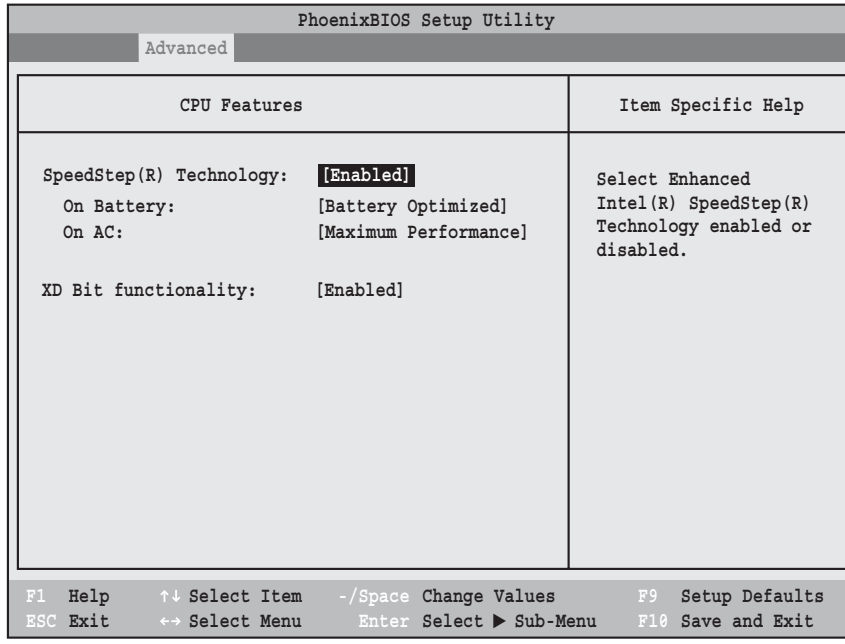
PhoenixBIOS Setup Utility
Advanced
CPU Features
Item Specific Help
SpeedStep(R) Technology: [Enabled]
On Battery: [Battery Optimized]
On AC: [Maximum Performance]
XD Bit functionality: [Enabled]
Select Enhanced Intel(R) SpeedStep(R) Technology enabled or disabled.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 7. CPU Features Submenu

Table 7: Fields, Options and Defaults for the CPU Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
SpeedStep(R) Technology:	• Disabled • Enabled	[Enabled]	Enables or disables the SpeedStep Technology features.
On Battery:	• Maximum Performance • Battery Optimized • Automatic	[Battery Optimized]	Allows the user to select the CPU operational mode when the system is running on battery power.
On AC:	• Maximum Performance • Battery Optimized • Automatic	[Maximum Performance]	Allows the user to select the CPU operational mode when the system is running on AC power.
XD Bit functionality:	• Enabled • Disabled	[Enabled]	Allows the user to enable and disable the Execute Disable Bit functionality. Execute Disable Bit allows the processor to classify areas in memory where application code can execute and where it cannot. In the event an internet worm attempts to insert code in the buffer, the processor disables code execution, preventing damage or worm propagation.

USB Features Submenu of the Advanced Menu

The USB Features submenu configures the USB capabilities of the system.

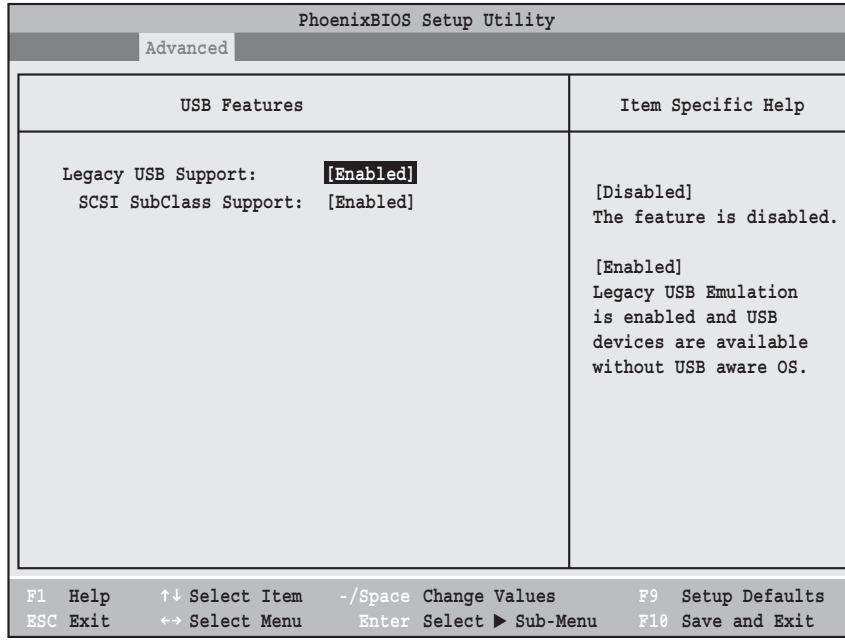
PhoenixBIOS Setup Utility
Advanced
USB Features
Item Specific Help
Legacy USB Support: [Enabled]
SCSI SubClass Support: [Enabled]
[Disabled]
The feature is disabled.
[Enabled]
Legacy USB Emulation is enabled and USB devices are available without USB aware OS.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 8. USB Features Submenu

Table 8: Fields, Options and Defaults for the USB Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Legacy USB Support:	• Disabled • Enabled	[Enabled]	When Disabled is selected, legacy USB emulation is disabled. When Enabled is selected, legacy USB emulation is enabled and USB devices are available without USB-aware OS.
SCSI SubClass Support:	• Disabled • Enabled	[Enabled]	When Enabled is selected, USB devices that belong to the SCSI subclass in the mass storage class (e.g., USB Memory Key) are enabled. Note that enabling this feature may cause the system to hang during POST, depending on the device that is connected.

Miscellaneous Features Submenu of the Advanced Menu

The Miscellaneous Features submenu configures the power button and performance control features of the system.

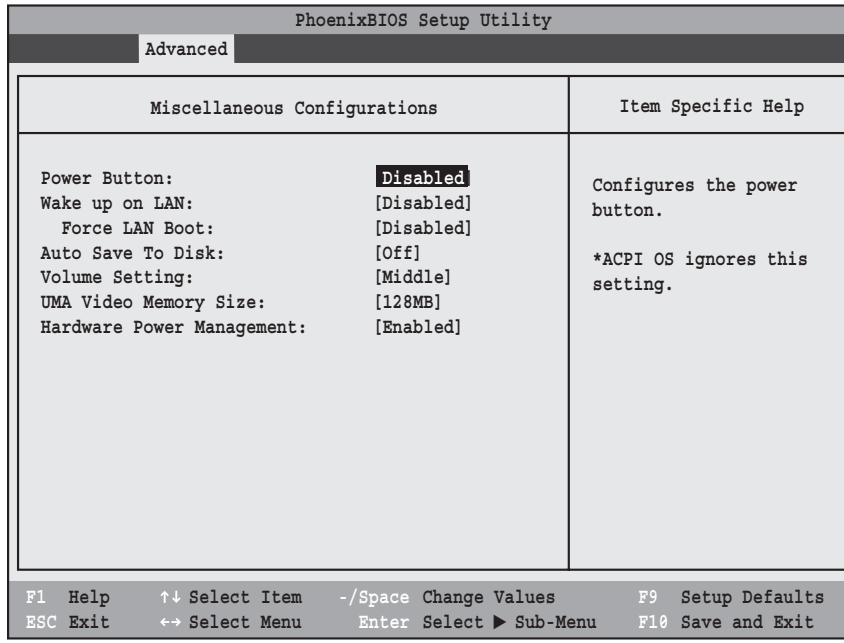
PhoenixBIOS Setup Utility
Advanced
Miscellaneous Configurations
Item Specific Help
Power Button: Disabled
Wake up on LAN: [Disabled]
Force LAN Boot: [Disabled]
Auto Save To Disk: [Off]
Volume Setting: [Middle]
UMA Video Memory Size: [128MB]
Hardware Power Management: [Enabled]
Configures the power button.
*ACPI OS ignores this setting.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 9. Miscellaneous Features Submenu

Table 9: Fields, Options and Defaults for the Miscellaneous Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Power Button:	• Disabled • Power Off	[DIsabled]	When Disabled is selected, the power button does not respond to a press. When Power Off is selected, the button turns the power off.
Wake up on LAN:	• Disabled • Enabled	[Disabled]	When Enabled is selected, the system will wake up when the internal LAN device receives a Magic Packet while the system is powered off.
Force LAN Boot:	• Disabled • Enabled	[Disabled]	This feature is active only when "Wake up on LAN" is enabled. When enabled, in the event of a system wake-up on LAN, the system will try to first boot from the LAN before attempting to boot from any other device, regardless of the BIOS boot priority settings or disabling of the Preboot Execution Environment.
Auto Save To Disk:	• Off • On	[Off]	When turned On, when the battery becomes low and the system is in Suspend mode, the system will automatically save its state and the power off.

Table 9: Fields, Options and Defaults for the Miscellaneous Features Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Volume Setting:	• Off • Minimum • Middle • Maximum	[Middle]	Selects the initial volume setting for the system.
UMA Video Memory Size:	• 64MB • 128MB • 224MB	[128MB]	Allows you to select the maximum shared video memory size. Video memory is dynamically allocated as needed for running applications by Dynamic Video Memory Technology (DVMT).
Hardware Power Management:	• Disabled • Enabled	[Enabled]	When enabled, the Hardware Power Management feature is enabled.

Event Logging Submenu of the Advanced Menu

The Event Logging submenu is for setting up the logs for DMI event logging.

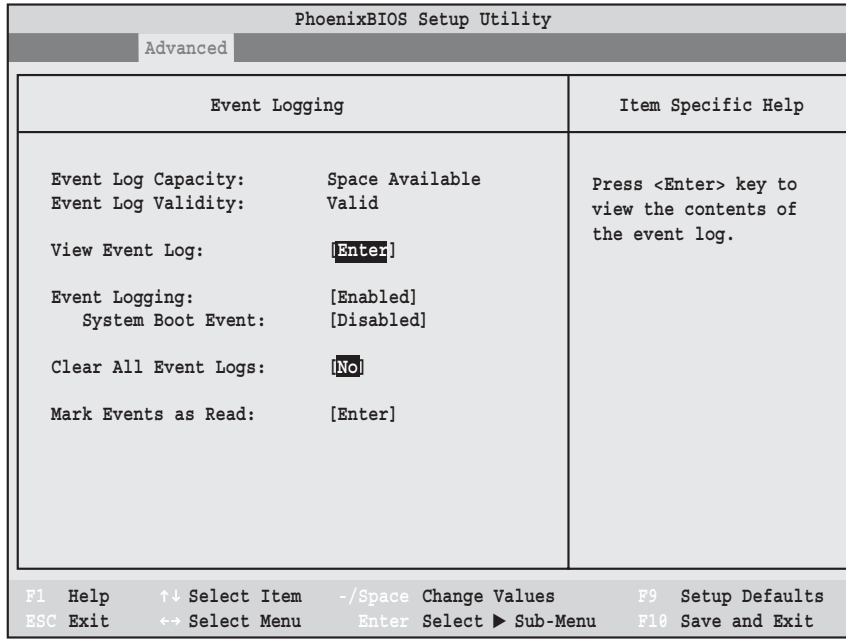
PhoenixBIOS Setup Utility
Advanced
Event Logging
Item Specific Help
Event Log Capacity: Space Available
Event Log Validity: Valid
View Event Log: [Enter]
Event Logging: [Enabled]
System Boot Event: [Disabled]
Clear All Event Logs: [No]
Mark Events as Read: [Enter]
Press <Enter> key to view the contents of the event log.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 10. Event Logging Submenu

Table 10: Fields, Options and Defaults for the Event Logging Submenu of the Advanced Menu

Menu Field	Options	Default	Description
Event Log Capacity:		Space Available	Display only
Event Log Validity:		Valid	Display only
View Event Log:	• Enter	[Enter]	Allows you to view content of event log.
Event Logging:	• Disabled • Enabled	[Enabled]	Turns event logging on and off for all DMI events.
System Boot Event:	• Disabled • Enabled	[Disabled]	Turns event logging on and off for DMI system boot events.
Clear All Event Logs:	• No • Yes	[No]	When set to [Yes] all event logs will be cleared at next boot.
Mark Events as Read:	• Enter	[Enter]	Allows you to select all events currently in the event log as read.

SECURITY MENU – SETTING THE SECURITY FEATURES

The Security menu allows you to set up the data security features of your notebook to fit your operating needs and to view the current data security configuration. Follow the instructions for Navigating through the Setup Utility to make any changes.

- If you set a password, write it down and keep it in a safe place. If you forget the password you will have to contact your support representative to regain access to your secured functions and data.
- If you make an error when re-entering the password a [Warning] will be displayed on the screen. To try again, press the **Enter** key and then retype the password. Press the **Esc** key to abort the password setting process.
- Boot sector protection must be set to [Normal] to install or upgrade an operating system.

- Entering a password incorrectly three times in a row will cause the keyboard and mouse to be locked out and the warning [System Disabled] to be displayed. If this happens, restart the computer by turning off and on the power with the power switch and use the correct password on reboot.
- If the Password on Resume is Enabled and the Password on Boot is Disabled you will not have to type your password upon resuming the system from the Standby or Hibernate modes. Power Management Security will work only if Password on Boot is enabled.

The following tables show the names of the menu fields for the Security menu and submenus, all of the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use. The default condition is no passwords required and no write protection.

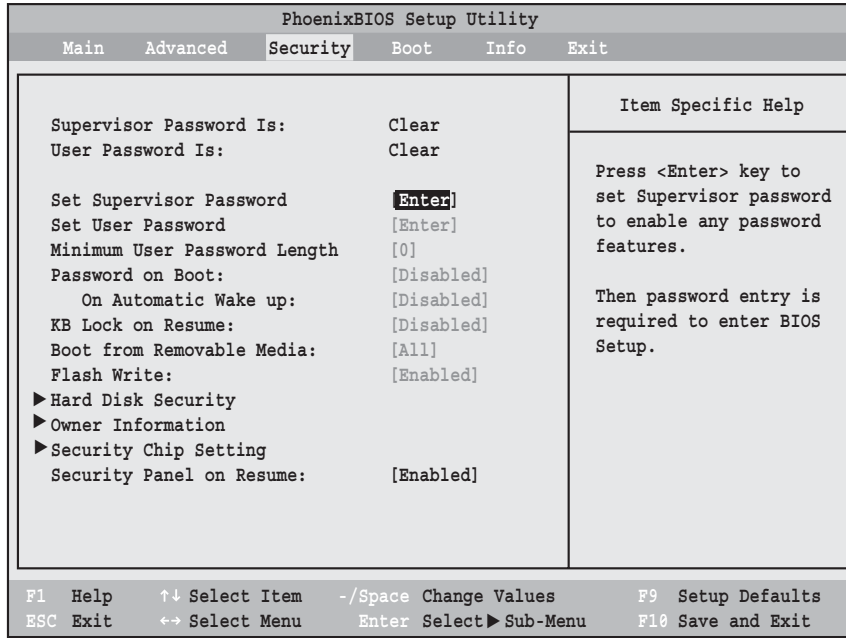
PhoenixBIOS Setup Utility
Main Advanced Security Boot Info Exit
Supervisor Password Is: Clear
User Password Is: Clear
Set Supervisor Password [Enter]
Set User Password [Enter]
Minimum User Password Length [0]
Password on Boot: [Disabled]
On Automatic Wake up: [Disabled]
KB Lock on Resume: [Disabled]
Boot from Removable Media: [All]
Flash Write: [Enabled]
▶Hard Disk Security
▶Owner Information
▶Security Chip Setting
Security Panel on Resume: [Enabled]
Item Specific Help
Press <Enter> key to set Supervisor password to enable any password features.
Then password entry is required to enter BIOS Setup.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select▶Sub-Menu F10 Save and Exit

Figure 11. Security Menu

Table 11: Fields, Options and Defaults for the Security Menu

Menu Field	Options	Default	Description
Supervisor Password is:	—	Clear	A display-only field. Set is displayed when the system supervisor password is set and Clear when it is not.
User Password is:	—	Clear	A display-only field. Set is displayed when the general user password is set, and Clear when it is not.
Set Supervisor Password	—	[Enter]	Sets, changes or cancels Supervisor Password. Supervisor Password may be up to seven characters long and must include only letters or numbers (no symbols). Passwords are NOT case-sensitive. To cancel a password press [Enter] instead of entering characters in the Enter New Password field and in the Re-enter New Password field. When a Supervisor Password is set it must be used to access BIOS setup utility.
Set User Password	—	[Enter]	This field can only be accessed if the Supervisor Password is set. Sets, changes or cancels the User Password. A User Password may be up to seven characters long and must include only letters or numbers (no symbols). Passwords are NOT case-sensitive. To cancel a password press the Enter key instead of entering characters in the Enter New Password field and in the Re-enter New Password field. When a User Password is set it must be used to access the setup utility.
Minimum User Password Length:	—	[0]	—
Password on Boot:	• Disabled • First Boot • Every Boot	[Disabled]	When set to Disabled, no password is required. When set to First Boot, password entry is required only before first boot. When Every Boot is selected, password is required every time the system is booted.
On Automatic Wake up:	• Disabled • Enabled	[Disabled]	When Disabled, a password is not required on LAN or RTC automatic wake up. When Enabled, password is required on automatic wake up.
KB Lock on Resume:	• Disabled • Enabled	[Disabled]	When Enabled, PS/2 keyboard or mouse inputs are locked out at Resume From Standby or Hibernate until entering password.
Boot from Removable Media:	• All • Supervisor only	[All]	When Supervisor Only is selected, only the Supervisor can boot from removable media. Only the user who enters the Supervisor Password before OS boot is treated as the Supervisor. When All is selected, booting from removable media is not restricted.
Flash Write:	• Disabled • Enabled	[Enabled]	When disabled, the BIOS Flash memory is write-protected. When enabled, the BIOS Flash memory is not write-protected.
Hard Disk Security:	—	—	Submenu for configuring hard disk security features.

Table 11: Fields, Options and Defaults for the Security Menu

Menu Field	Options	Default	Description
Owner Information:	—	—	Submenu for setting Owner information.
Security Chip Setting	—	—	Submenu for setting the Security Chip features
Security Panel on Resume:	• Disabled • Enabled	[Enabled]	Allows you to enable or disable the Security Panel feature upon Resume from Suspend.

Exiting from the Security Menu

When you have finished setting the parameters on the Security Menu, you can either exit from setup utility or move to another menu. If you wish to exit from the setup utility, press the [Esc] key to go to the Exit Menu. If you wish to move to another menu, use the cursor keys.

Hard Disk Security Submenu of the Security Menu

The Hard Disk Security submenu is for configuring hard disk security features.

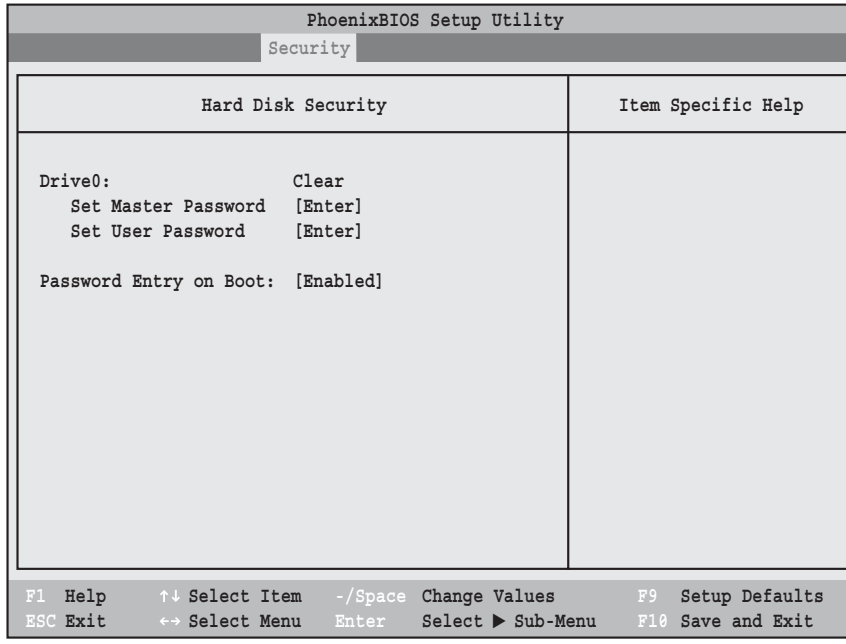
PhoenixBIOS Setup Utility
Security
Hard Disk Security
Item Specific Help
Drive0: Clear
Set Master Password [Enter]
Set User Password [Enter]
Password Entry on Boot: [Enabled]
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 12. Hard Disk Security Submenu

Table 12: Fields, Options and Defaults for the Hard Disk Security Submenu of the Security Menu

Menu Field	Options	Default	Description
Drive0:	___	Clear	A display-only field. Set is displayed when the Drive0 Password is set and Clear when it is not.
Set Master Password	___	[Enter]	Sets, changes or cancels Master Password. The Master Password may be up to eight characters long and include only letters or numbers (no symbols). Passwords are NOT case-sensitive. To cancel a password press the Enter key instead of entering characters in the Enter New Password field and in the Re-enter New Password field. When a Primary Master Password is set it must be used to access the hard disk. Data on the hard disk cannot be read on other systems.
Set User Password	___	[Enter]	Sets, changes or cancels User Password. The User Password may be up to eight characters long and include only letters or numbers (no symbols). Passwords are NOT case-sensitive. To cancel a password press the Enter key instead of entering characters in the Enter New Password field and in the Re-enter New Password field.
Password Entry on Boot:	• Disabled • Enabled	[Enabled]	When set to Disabled, it is not necessary to enter a hard disk password before booting. The hard disk is still password-protected without password entry.

Owner Information Submenu of the Security Menu

The Owner Information submenu is for setting owner information.

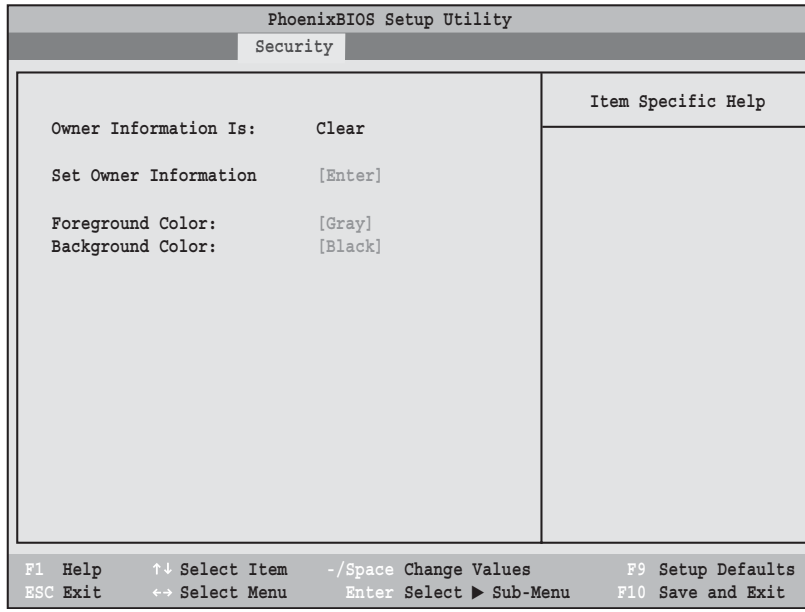
PhoenixBIOS Setup Utility
Security
Item Specific Help
Owner Information Is: Clear
Set Owner Information [Enter]
Foreground Color: [Gray]
Background Color: [Black]
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 13. Owner Information Submenu

Table 13: Fields, Options and Defaults for the Owner Information Submenu of the Security Menu

Menu Field	Options	Default	Description
Owner Information Is:	—	Clear	Display only.
Set Owner Information:	—	[Enter]	Field to write owner information (i.e., name).
Foreground Color:	• Black • Blue • Green • Cyan • Red • Magenta • Brown • White • Gray • Light Blue • Light Green • Light Cyan • Light Red • Light Magenta • Yellow • Bright White	[Gray]	
Background Color:	• Black • Blue • Green • Cyan • Red • Magenta • Brown • White • Gray • Light Blue • Light Green • Light Cyan • Light Red • Light Magenta • Yellow • Bright White	[Black]	

Security Chip Setting Submenu of the Security Menu

The Security Chip Setting Security submenu is for configuring security chip features.

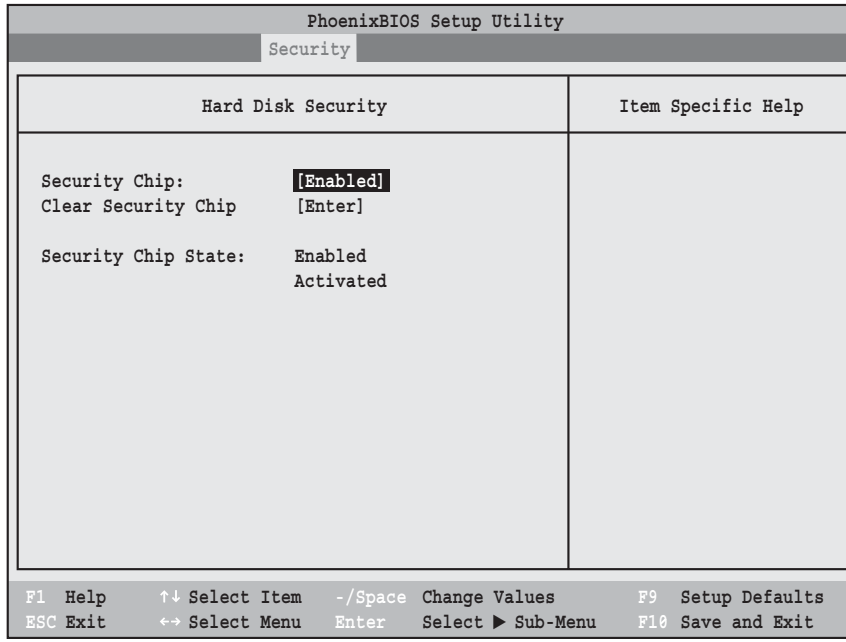
PhoenixBIOS Setup Utility
Security
Hard Disk Security
Item Specific Help
Security Chip: [Enabled]
Clear Security Chip [Enter]
Security Chip State: Enabled
Activated
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 14. Security Chip Setting Submenu

Table 14: Fields, Options and Defaults for the Security Chip Setting Submenu of the Security Menu

Menu Field	Options	Default	Description
Security Chip:	• Disabled • Enabled	[Enabled]	Allows you to enable or disable the Security Chip. When disabled, the following field does not appear.
Clear Security Chip	____	[Enter]	Allows you to clear the security chip. Note that if you clear the security chip, you will not be able to access data that has already been encrypted.
Security Chip State:	——	——	Display only, to indicate the state of the chip if it has been enabled, disabled, activated or deactivated.

BOOT MENU – SELECTING THE OPERATING SYSTEM SOURCE

The Boot Menu is used to select the order in which the BIOS searches sources for the operating system. Follow the instructions for Navigating through the Setup Utility to make any changes.

The following tables show the names of the menu fields for the Boot menu and its submenu, all of the options for each field, the default settings and a description of the field's function and any special information needed to help understand the field's use.

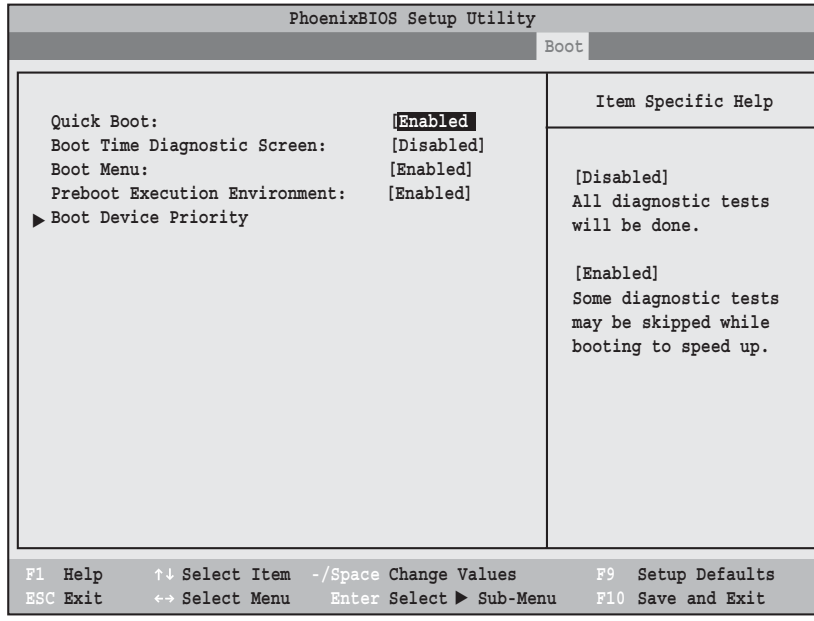
PhoenixBIOS Setup Utility
Boot
Item Specific Help
Quick Boot: [Enabled]
Boot Time Diagnostic Screen: [Disabled]
Boot Menu: [Enabled]
Preboot Execution Environment: [Enabled]
▶ Boot Device Priority
[Disabled]
All diagnostic tests will be done.
[Enabled]
Some diagnostic tests may be skipped while booting to speed up.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 15. Boot Menu

Table 15: Fields, Options and Defaults for the Boot Menu

Menu Field	Options	Default	Description
QuickBoot:	• Disabled • Enabled	[Enabled]	Turns on and off booting with a truncated set of Power On Self Test. (Fewer tests mean faster booting)
Boot-time Diagnostic Screen:	• Disabled • Enabled	[Disabled]	Turns on and off display of test results instead of Fujitsu logo screen during Power On Self Test.
Boot Menu:	• Disabled • Enabled	[Enabled]	When disabled, BOOT menu is disabled and the F12 key is ignored; when enabled, BOOT Menu is enabled. This is only active when a Supervisor Password has been set.
Preboot Execution Environment:	• Disabled • Enabled	[Enabled]	When enabled, booting from a network server (Preboot Execution Environment) is enabled.
Boot Device Priority	—	—	This menu allows setting up the source for the operating system.Selects the Boot Device Priority submenu.

Boot Device Priority Submenu of the Boot Menu

The Boot Device Priority submenu is for setting the order of checking of sources for the operating system.

- Be aware of the operating environment when booting from a CD or you may overwrite files by mistake.
- A bootable CD-ROM has either a floppy disk or a hard drive format. When a bootable CD-ROM is used, drive allocations change automatically without changing the BIOS setup. If floppy disk format is used, the CD-ROM becomes Drive A. The CD-ROM will only take drive C: (hard drive format) if the internal hard drive is not present or is disabled. A bootable CD-ROM cannot use a C: designation if a formatted internal hard drive is present since the C: designator is always reserved for the internal hard drive.The boot sequence ignores new drive designations, but your application software will use the new designations.
- In order for a portable USB memory device (e.g., JumpDrive or memory stick) to be recognized in the Boot Device Priority list, it must have been installed before booting the system.
- Note that some older portable USB memory devices may not be recognized as bootable devices.
- The Boot Menu can also be invoked outside of the Setup Utility using the TrustedCore menu or the [F12] key. See Using the TrustedCore Menu for more information.

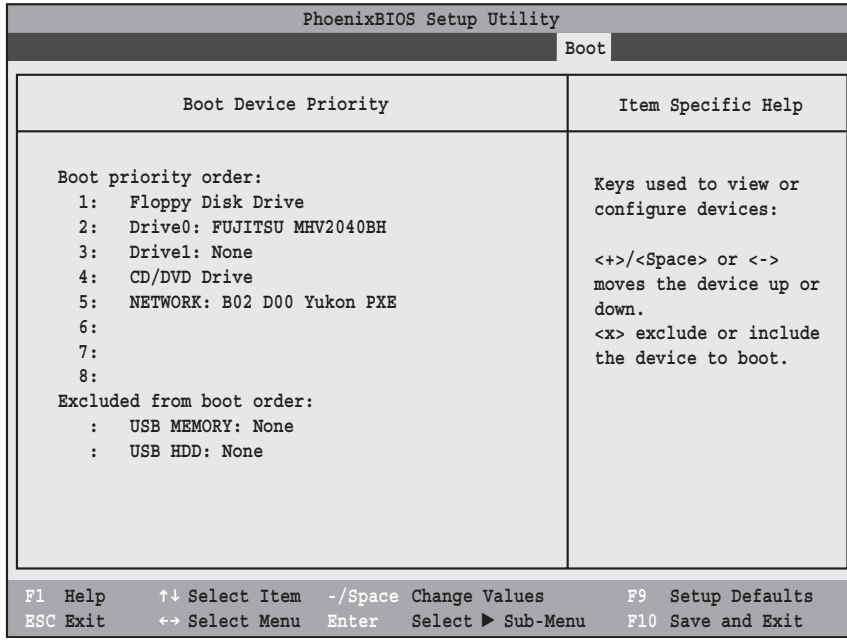
PhoenixBIOS Setup Utility
Boot
Boot Device Priority
Item Specific Help
Boot priority order:
1: Floppy Disk Drive
2: Drive0: FUJITSU MHV2040BH
3: Drive1: None
4: CD/DVD Drive
5: NETWORK: B02 D00 Yukon PXE
6:
7:
8:
Excluded from boot order:
: USB MEMORY: None
: USB HDD: None
Keys used to view or configure devices:
<+>/<Space> or <-> moves the device up or down.
<x> exclude or include the device to boot.
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 16. Boot Device Priority Submenu

Table 16: Fields, Options and Defaults for the Boot Device Priority Submenu of the Boot Menu

Menu Field	Description
Boot priority order: 1: Floppy Disk Drive 2: Drive0: 3: CD/DVD Drive 4: NETWORK: 5: 6: 7: 8: Excluded from boot order: : USB MEMORY: : USB HDD:	The boot selections determine the order in which the BIOS searches for the operating system during a startup sequence. To change the order, highlight one source by using the [up] or [down] cursor keys and then press the [+] or [-] key to change the order number. Tapping [x] removes from the list a device that is not installed. Tapping [x] on an item in the Excluded list adds the device to the Boot priority list. Be sure to save your changed order when you exit the BIOS setup utility. NOTE: Be aware that if you use the CD-ROM drive as the first boot device, certain files may be overwritten, depending upon your operating environment.

Exiting from Boot Menu

When you have finished setting the boot parameters with the Boot menu, you can either exit from the setup utility or move to another menu. If you wish to exit from the setup utility press the [Esc] key to go to the Exit menu. If you wish to move to another menu, use the cursor keys.

INFO MENU - DISPLAYS BASIC SYSTEM INFORMATION

The Info menu is a display-only screen that provides the configuration information for your notebook.

The following table shows the names of the menu fields for the Info menu and the information displayed in those fields. These fields are for information purposes only, and are not editable.

The information, including CPU type and speed, and total memory, displayed on this screen varies according to the unit you purchased.

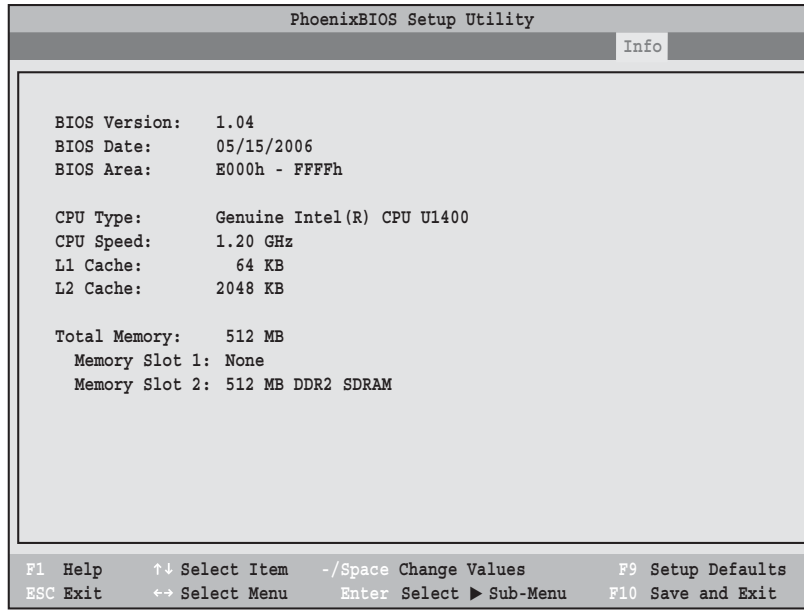
PhoenixBIOS Setup Utility
Info
BIOS Version: 1.04
BIOS Date: 05/15/2006
BIOS Area: E000h - FFFFh
CPU Type: Genuine Intel(R) CPU U1400
CPU Speed: 1.20 GHz
L1 Cache: 64 KB
L2 Cache: 2048 KB
Total Memory: 512 MB
Memory Slot 1: None
Memory Slot 2: 512 MB DDR2 SDRAM
F1 Help ↑↓ Select Item -/Space Change Values F9 Setup Defaults
ESC Exit ↔ Select Menu Enter Select ▶ Sub-Menu F10 Save and Exit

Figure 17. Info Menu

Note that the information displayed on this screen may vary depending upon the configuration of the unit you purchased.

Table 17: Fields, Options and Defaults for the Info Menu

Menu Field	Default	Menu Field	Default
BIOS Version:	1.04	L1 Cache:	64 KB
BIOS Date:	05/16/2006	L2 Cache:	2048 KB
BIOS Area:	E000h – FFFFh	Total Memory:	512 MB
CPU Type:	Genuine Intel(R) CPU U1400	Memory Slot 1:	None
CPU Speed:	1.20 GHz	Memory Slot 2:	512 MB DDR2 SDRAM

EXIT MENU – LEAVING THE SETUP UTILITY

The Exit Menu is used to leave the setup utility. Follow the instructions for Navigating through the Setup Utility to make any changes.

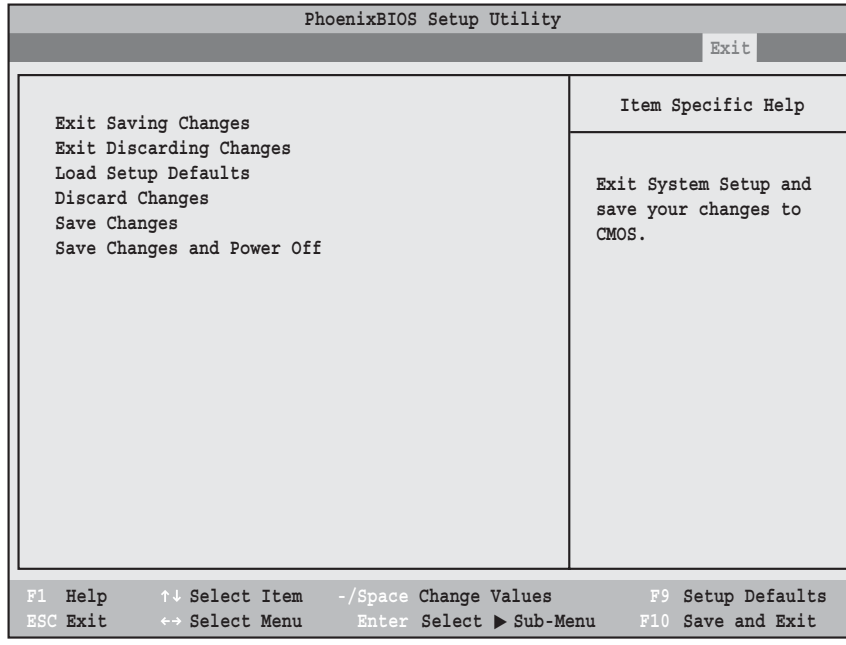

Figure 18. Exit Menu

The following table shows the names of the menu fields for the Exit menu, the default settings and a description of the field's function and any special information needed to help understand the field's use.

Table 18: Fields, Options and Defaults for the Exit Menu

Menu Field	Optional Keyboard Shortcut	Description
Exit Saving Changes	Press the F10 key	Exit Saving Changes and Exit will store all the entries on every menu of the setup utility to the BIOS memory and then exit the setup utility. A confirmation message Save Configuration changes and exit now? [Yes] [No] will be displayed.
Exit Discarding Changes	——	Selecting Exit Discarding Changes and Exit will exit the setup utility with out writing to the BIOS memory. When the BIOS recognizes this selection it will load the operating system and begin operation.

Table 18: Fields, Options and Defaults for the Exit Menu

Menu Field	Optional Keyboard Shortcut	Description
Load Setup Defaults	Press the `F9` key	Selecting Load Setup Defaults will load the factory preset default values for all menu fields, then display the message `Load default configuration now? [Yes] [No].` When confirmed the setup utility will return to the Exit Menu. To return to another menu follow the directions in the Navigating through the Setup Utility section.
Discard Changes	—	Selecting Discard Changes loads the previous values in BIOS memory for all menu fields. The message `Load previous now? [Yes] [No]` will be displayed. When confirmed the setup utility will return to the Exit menu. To go to another menu, follow the directions in the Navigating through the Setup Utility section.
Save Changes	—	Selecting Save Changes will cause the new settings in all menus to be written to the BIOS memory. The message `Save configuration changes now? [Yes] [No]` will be displayed. When confirmed, the setup utility will return to the Exit menu. To return to another menu, follow the directions in the Navigating through the Setup Utility section.
Save Changes and Power Off	—	Selecting Save Changes and Power Off will cause the new settings in all menus to be written to the BIOS memory, then power the system off. The message `Save configuration changes now and power off? [Yes] [No]` will be displayed. When confirmed, the setup utility shut down the system.